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United States Patent [19]
Brain

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[54] **GASTRO-LARYNGEAL MASK**

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[63] Continuation of Ser. No. 609,521, Mar. 1, 1996, abandoned.

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604/96; 604/174

[58] **Field of Search** **128/207.15, 207.14,**
128/200.26; 604/96-103, 174

[56] **References Cited****U.S. PATENT DOCUMENTS**

5,241,956 9/1993 Brain 128/207.15
5,305,743 4/1994 Brain 128/207.15
5,355,879 10/1994 Brain 128/207.15

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[57] **ABSTRACT**

A gastro-laryngeal mask features softly compliant construction of the distal half of the mask, wherein the mask is of generally elliptical configuration, with an inflatable peripheral cuff to seal and support the mask around the laryngeal inlet. A back cushion is inflatable to engage the back wall of the pharynx and thus to forwardly load the peripheral-cuff seal to the laryngeal inlet. An evacuation tube for external removal of a possible gastric discharge completes an evacuation or discharge passage contained within the mask and opening through the distal end of the peripheral cuff. Special provision is made for assuring integrity of the discharge passage within the flexible distal half of the mask, i.e., assuring against collapse of the distal-end half of the softly compliant evacuation tube in the distal region of the mask, such that inflation of the mask does not compromise viability of the evacuation tube by compressing softly compliant material of the evacuation tube during periods of mask inflation. The special provision also favors such collapse of the mask when deflated as to provide a leading flexible edge for piloting a safe and correct advancing insertional advance of the deflated mask in the patient's throat, in avoidance of epiglottis interference and to the point of locating engagement in the upper sphincter of the oesophagus.

13 Claims, 3 Drawing Sheets